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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/816,841	PATEL ET AL.	
	Examiner	Art Unit	
	BO HUI A. ZHU	2419	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on *05 April 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-28* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-28* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *05 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Specification

1. The abstract of the disclosure is objected to because it exceeds 150 words in length. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 9 – 13, 23, 27 and 28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, the limitation “the output source signals” lacks proper antecedence basis. The claim only defines an output source signal. Further, it is not clear what is meant by “producing each of the output source signals by retrieving one or more output source signals and combining the retrieved output source signals”. Accordingly, all of the dependent claims of claim 9 have been rejected as well for the same reason.

In claim 23, the limitation "treating the processed packets as packetized signal packets" is vague.

In claim 27, the limitation "the global identification code distribution table" lacks proper antecedence basis.

In claim 28, the limitations "the storage location table" and “the number of output stages” both lack proper antecedence basis. In addition, it is not clear what is meant by a stage requiring a packet from a packet storage location as recited in “the number of output stages that require a packetized signal packet from each packet storage location” and “if no output stage requires a packetized signal packet".

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

5. Claims 1 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695)

(1) with regard to claim 1:

Hendricks et al. discloses a system and method comprising: (a) receiving a plurality of input signals (86, Fig. 7); (b) buffering each of the input signals in a memory system (142, Fig. 7); (c) processing at least one of the input signals to provide a processed signal and buffering the processed signal in the memory system (DEMUX 144 processes the input signals 86 to provide processed signals); (d) designating at least some of the input signals or the processed signals as packet source signals

(selecting device 140 selects input signals as packet source signals; see e.g. column 13, lines 19 - 36).

Hendricks et al. does not disclose the feature of assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal.

Schaub et al. teaches assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal (e.g. see Fig. 1 and column 2, lines 7 - 45, i.e. data signal of a set is transmitted in a series of packets over a communication link; each packet is assigned A, B, C or D to specify the set it belongs to; a set of packets can be defined as a group of packet having e.g. the same flow, MAC address, or IP address, etc.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal

wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal as shown in Schaub et al. in order to increase transmission capacity.

(2) with regard to claim 8:

Hendricks et al. further discloses the processing step includes compressing one of the input signals to provide a processed signal (108, Fig. 5b).

6. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and further in view of Wager et al. (US 6,519,223).

(1) with regard to claim 2:

Hendricks et al. does not disclose the feature of each of packet source signals comprises a series of packet source signal packets, and wherein each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal, extracting data from the retrieved packets, recording the global identification code of the single packet source signal and at least a portion of the extracted data in the packetized signal packet.

Schaub et al. teaches each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal (A, B, C or D packet set each represents a packet source signal), extracting data from the retrieved packets, recording the global identification code of the single packet

source signal and at least a portion of the extracted data in the packetized signal packet (each packet of a packet set contains a identifier that specify its packet set, and a portion of payload).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal, extracting data from the retrieved packets, recording the global identification code of the single packet source signal and at least a portion of the extracted data in the packetized signal packet as shown in Schaub et al. in order to increase transmission capacity.

Wager et al. teaches the feature of each of packet source signals (210, Fig. 2) comprises a series of packet source signal packets (215, Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packet source signals comprises a series of packet source signal packets as shown in Wager et al. in order to improve transmission reliability.

(2) with regard to claim 3:

Hendricks et al. does not disclose the feature of each of packet source signals comprises a series of packet source signal packets, and wherein each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal and including the packet source signal packet within the packetized signal packet.

Schaub et al. teaches each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal (A, B, C or D packet set, Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal as shown in Schaub et al. in order to increase transmission capacity.

Wager et al. teaches the feature of each of packet source signals (210, Fig. 2) comprises a series of packet source signal packets (215, Fig. 2), and wherein each of packetized signal packets is formed by including the packet source signal packet (220, Fig. 2) within the packetized signal packet.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of feature of each of packet source signals comprises a series of packet source signal packets, and wherein each of packetized signal packets is formed by including the packet source signal packet within the packetized signal packetas shown in Wager et al. in order to improve transmission reliability.

7. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and further in view of Westberg (US 2003/1098226).

(1) with regard to claim 4:

Hendricks does not disclose each of packetized signal packets includes a global identification code, packet sequencing information and a data payload.

Schaub et al. teaches each of packetized signal packets includes a global identification code and a data payload (e.g. see Fig. 1 and column 2, lines 7 - 45, i.e. data signal of a set is transmitted in a series of packets over a communication link; each packet is assigned A, B, C or D to specify the set it belongs to; a set of packets can be defined as a group of packet having e.g. the same flow, MAC address, or IP address, etc).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packetized signal packets includes a global identification code and a data payload as shown in Schaub et al. in order to increase transmission capacity.

Westberg teaches a packet includes packet sequencing information (paragraph [0043]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packetized signal packets includes a sequencing information as shown in Westberg in order to allow segmented data packet to be reassembled without error.

8. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and Westberg (US 2003/1098226) and further in view of Hojabri (US 6,950,097).

(1) with regard to claim 5:

Hendricks et al. further disclose the single packet source signal is a video signal (video signal, Fig. 6a) and wherein each packetized signal corresponding to the packet source signal includes video data (sports, movies, etc., Fig. 6a)

Hendricks et al. does not disclose the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display.

Hojabri teaches the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display (e.g. see column 5, lines 41 - 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display as shown in Hojabri in order to have more flexibility in the format of the output.

(2) with regard to claim 6:

Hendricks et al. does not disclose the position information includes pixel information indicating a position within a window at which the video data is to be displayed.

Hojabri teaches the position information includes pixel information indicating a position within a window at which the video data is to be displayed (e.g. see column 5, lines 41 - 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of the position information includes pixel information indicating a position within a window at which the video data is to be displayed as shown in Hojabri in order to have more flexibility in the format of the output.

9. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and further in view of Gryskiewicz (US 6,937,291).

(1) with regard to claim 7:

Hendricks et al. does not disclose the processing step includes scaling one of the input signals to provide a processed signal.

Gryskiewicz teaches the feature of scaling input signals to provide a processed signal (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hendricks et al. to include the feature of the processing step includes scaling one of the input signals to provide a processed signal as shown in Gryskiewicz so as to have flexibility in changing the size and dimension of the output signal as well as to avoid aliasing artifacts of video signal.

10. Claims 9 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and further in view of Libizay et al. (US 2003/0156535).

(1) with regard to claim 9:

Hendricks et al. discloses a system and method comprising: receiving a plurality of input signals (86, Fig. 7); buffering each of the input signals in a memory system (142, Fig. 7); processing at least one of the input signals to provide a processed signal and buffering the processed signal in the memory system (DEMUX 144 processes the input signals 86 to provide processed signals); designating at least some of the input signals or the processed signals as packet source signals (selecting device 140 selects input signals as packet source signals; see e.g. column 13, lines 19 - 36); transmitting packetized signal across a communications link (50, Fig. 6a).

Hendricks et al. does not disclose the feature of assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal; receiving the packetized signal; extracting each of the packetized signal packets from the packetized signal; buffering each of the packetized signal packets containing the same global identification code in a separate data buffer in an output processor memory system and designating the

packetized signal packets in each separate data buffer as an output source signal; producing each of the output source signals by retrieving one or more output source signals and combining the retrieved output source signals.

Schaub et al. teaches assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal (e.g. see Fig. 1 and column 2, lines 7 - 45, i.e. data signal of a set is transmitted in a series of packets over a communication link; each packet is assigned A, B, C or D to specify the set it belongs to; a set of packets can be defined as a group of packet having e.g. the same flow, MAC address, or IP address, etc.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of assigning each of the packet source signals a unique global identification code; retrieving at least one of the packet source signals and generating a packetized signal wherein the packetized signal includes a series of packetized signal packet, wherein each of the packetized signal packets contains the global identification code of one of the packet source signals and data corresponding to the same packet source signal as shown in Schaub et al. in order to increase transmission capacity.

Lebizay et al. teaches receiving the packetized signal (410, Fig. 4) extracting each of the packetized signal packets from the packetized signal (paragraph [0031]); buffering each of the packetized signal packets containing the same global identification code in a separate data buffer in an output processor memory system and designating the packetized signal packets in each separate data buffer as an output source signal (430, Fig. 4; paragraph [0032]); producing each of the output source signals by retrieving one or more output source signals and combining the retrieved output source signals (450, Fig; paragraph [0051]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of receiving the packetized signal; extracting each of the packetized signal packets from the packetized signal; buffering each of the packetized signal packets containing the same global identification code in a separate data buffer in an output processor memory system and designating the packetized signal packets in each separate data buffer as an output source signal; producing each of the output source signals by retrieving one or more output source signals and combining the retrieved output source signals as shown by Lezibay et al. so as to provide quality of service to network traffic and make switching of network traffic more efficient.

(2) with regard to claim 13:

Hendricks et al. further discloses the processing step includes compressing one of the input signals to provide a processed signal (108, Fig. 5b).

11. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and Libizay et al. (US 2003/0156535 and further in view of Wager et al. (US 6,519,223).

(1) with regard to claim 10:

Hendricks et al. does not disclose the feature of each of packet source signals comprises a series of packet source signal packets, and wherein each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal, extracting data from the retrieved packets, recording the global identification code of the single packet source signal and at least a portion of the extracted data in the packetized signal packet.

Schaub et al. teaches each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal (A, B, C or D packet set), extracting data from the retrieved packets, recording the global identification code of the single packet source signal and at least a portion of the extracted data in the packetized signal packet (each packet of a packet set contains identifier A, B, C or D, and a portion of payload).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packetized signal packets is formed by retrieving one or more the packet source signal packets corresponding to a single packet source signal, extracting data from the retrieved packets, recording the global identification code of the single packet source

signal and at least a portion of the extracted data in the packetized signal packet as shown in Schaub et al. in order to increase transmission capacity.

Wager et al. teaches the feature of each of packet source signals (210, Fig. 2) comprises a series of packet source signal packets (215, Fig. 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of packet source signals comprises a series of packet source signal packets as shown in Wager et al. in order to improve transmission reliability.

12. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695), Libizay et al. (US 2003/0156535) and Wager et al. (US 6,519,223) and further in view of Hojabri (US 6,950,097).

(1) with regard to claim 11:

Hendricks et al. further disclose the single packet source signal is a video signal (video signal, Fig. 6a) and wherein each packetized signal corresponding to the packet source signal includes video data (sports, movies, etc., Fig. 6a)

Hendricks et al. does not disclose the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display.

Hojabri teaches the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display (e.g. see column 5, lines 41 - 50).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each packetized signal includes position information indicating how the video data is to be displayed on a video display as shown in Hojabri in order to have more flexibility in the format of the output.

13. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Schaub et al. (US 7,190,695) and Libizay et al. (US 2003/0156535) and further in view of Gryskiewicz (US 6,937,291)

(1) with regard to claim 12:

Hendricks et al. does not disclose the processing step includes scaling one of the input signals to provide a processed signal.

Gryskiewicz teaches the feature of scaling input signals to provide a processed signal (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hendricks et al. to include the feature of the processing step includes scaling one of the input signals to provide a processed signal as shown in Gryskiewicz in order to have the flexibility in changing the size and dimension of the output signal as well as to avoid aliasing artifacts of video signal.

14. Claims 14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Libizay et al. (US 2003/0156535).

(1) with regard to claim 14:

Hendricks et al. discloses a system and method comprising: a master controller (90, Fig. 7) for generating input processor control signals and output processor control signals; an input processor (104, Fig. 7) comprising: a plurality of input ports for receiving a plurality of input signals (86, Fig. 7); a plurality of input signal processors for processing the input signals to provide a processed signal; an input processor memory system (142, Fig. 7) for buffering the input signals and the processed signal (DEMUX 144 processes the input signals 86 to provide processed signals) and designating at least some of the input signals or the processed signals as packet source signals (selecting device 140 selects input signals as packet source signals; see e.g. column 13, lines 19 - 36); a packetized signal output port (102, Fig. 7); one or more packetized signal output stages for retrieving one or more packet source signals from the input processor memory system and for producing a packetized signal at the packetized signal output port, wherein the packetized signal contains data corresponding to each of the retrieved signals (102, Fig. 7; 148, Fig. 8); an input processor local controller (90, Fig. 7) for controlling the operation of at least the signal processors and the packetized signal output stages in responses to the input processor control signals; a communications link (50, Fig. 6a);

Hendricks et al. does not disclose a packetized signal input port for receiving the packetized signal; a packetized signal input stage for extracting data corresponding to each of the packet source signals from the packetized signal and for storing data corresponding to each of the packet source signals in a separate buffer in the output

processor memory system as an output source signal; an output signal generator for producing one or more output signals, each of the output signals corresponding to one or more of the output source signals; an output processor local controller for controlling the operation of packetized signal input stage and the output signal generator in response to the output processor control signals.

Lebizay et al. teaches receiving the packetized signal (410, Fig. 4) extracting each of the packetized signal packets from the packetized signal (paragraph [0031]); buffering each of the packetized signal packets containing the same global identification code in a separate data buffer in an output processor memory system and designating the packetized signal packets in each separate data buffer as an output source signal (430, Fig. 4; paragraph [0032]); producing each of the output source signals by retrieving one or more output source signals and combining the retrieved output source signals (450, Fig; paragraph [0051]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of a packetized signal input port for receiving the packetized signal; a packetized signal input stage for extracting data corresponding to each of the packet source signals from the packetized signal and for storing data corresponding to each of the packet source signals in a separate buffer in the output processor memory system as an output source signal; an output signal generator for producing one or more output signals, each of the output signals corresponding to one or more of the output source signals; an output processor local controller for controlling the operation of packetized signal input stage

and the output signal generator in response to the output processor control signals as shown by Lezibay et al. so as to provide quality of service to network traffic and make switching of network traffic more efficient.

(2) with regard to claim 17:

Hendricks et al. further discloses one or more data compression elements for providing a scaled version of the input signals to provide a processed signal (108, Fig. 5b).

(3) with regard to claim 18:

Hendricks et al. further discloses one or more A/D converters (96, Fig. 4) coupled between one or more of the input ports and the input processor memory system.

15. Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Libizay et al. (US 2003/0156535) and further in view of Schaub et al. (US 7,190,695).

(1) with regard to claim 15:

Hendricks et al. does not disclose the feature of each of the packet signal comprises a series of packet signal packets, and wherein each of packetized signal packets contains a global identification code.

Schaub et al. teaches each of the packet signal comprises a series of packet signal packets, and wherein each of packetized signal packets contains a global identification code (Fig. 1 and column 2, lines 7 – 45; each packet of a packet set contains a identifier that specify its packet set)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of each of the packet signal comprises a series of packet signal packets, and wherein each of packetized signal packets contains a global identification code as shown in Schaub et al. in order to increase transmission capacity.

16. Claim 16, 19 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Libizay et al. (US 2003/0156535) and further in view of Gryskiewicz (US 6,937,291)

(1) with regard to claim 16:

Hendricks et al. does not disclose the one or more video scalers for providing a scaled version of the input signal as a processed signal.

Gryskiewicz teaches the feature of scaling input signals to provide a processed signal (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hendricks et al. to include the feature of one or more video scalers for providing a scaled version of the input signal as a processed signal as shown in Gryskiewicz so as to have flexibility in changing the size and dimension of the output signal as well as to avoid aliasing artifacts of video signal.

(2) with regard to claim 19:

Hendricks et al. does not disclose the data compression elements include one or more horizontal line filters.

Gryskiewicz teaches a data compression element that includes one or more horizontal line filters (26, Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of the data compression elements include one or more horizontal line filters as shown in Gryskiewicz in order to modify the format of the video signals.

(3) with regard to claim 20:

Hendricks et al. does not disclose the data compression elements include one or more vertical line filters.

Gryskiewicz teaches a data compression element that includes one or more vertical line filters (Fig. 9).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of the data compression elements include one or more vertical line filters as shown in Gryskiewicz in order to modify the format of the video signals.

17. Claims 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hendricks et al. (US 7,269,841) in view of Gryskiewicz (US 6,937,291)

(1) with regard to claim 21:

Hendricks et al. discloses system comprising: a plurality of input ports for receiving a plurality of input signals (86, Fig. 7); a plurality of input signal processors for processing the input signals to provide a processed signal; a packetized signal output

stage for retrieving one or more packet source signals from a memory system (142, Fig. 7) and for producing a packetized signal at the packetized signal output port (102, Fig. 7; 148, Fig. 8); an input processor local controller (90, Fig. 7) for controlling the operation of the memory system, signal processors and the packetized signal output stage (50, Fig. 6a);

Hendricks et al. does not disclose a memory system for buffering the input signals; one or more signal processors for retrieving the input signals from the memory system and for processing the input signals to generate processed signals and for storing the processed signals in the memory system.

Gryskiewicz teaches a memory system (18 and 22, Fig. 1) for buffering the input signals (20, Fig. 1) ; one or more signal processors (26, Fig. 1) for retrieving the input signals from the memory system and for processing the input signals to generate processed signals (30, Fig. 1) and for storing the processed signals in the memory system.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of memory system for buffering the input signals; one or more signal processors for retrieving the input signals from the memory system and for processing the input signals to generate processed signals and for storing the processed signals in the memory system as shown in Gryskiewicz in order to modify the format of the video signals.

(2) with regard to claim 22:

Hendricks et al. does not disclose the processing step includes scaling one of the input signals to provide a processed signal.

Gryskiewicz teaches the feature of scaling input signals to provide a processed signal (see Fig. 1).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Hendricks et al. to include the feature of the processing step includes scaling one of the input signals to provide a processed signal as shown in Gryskiewicz so as to have flexibility in changing the size and dimension of the output signal as well as to avoid aliasing artifacts of video signal.

18. Claims 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lebizay et al. (US 2003/0156535) in view of Schaub et al. (US 7,190,695).

(1) with regard to claim 24:

Lebizay et al. discloses a method comprising: receiving one or more incoming packetized signals, each of the packetized signals including a plurality of packetized signal packets (packet ingress, Fig. 4); recording each of the packetized signal packets in a packet storage location (430 and 440, Fig. 4); recording a number of outgoing packetized signals in which each of the packetized signal packets will be included (420, 421 and 422, Fig. 4); instructing a group of packetized signal output stages to read each of the packetized signal packets (450, 451 and 452, Fig. 4), the number of packetized signal output stage corresponding to the number recorded in (c).

Lebizay et al. does not disclose the packetized signal packets are identified with a global identification code.

Schaub et al. teaches packetized signal packets are identified with a global identification code (e.g. see Fig. 1 and column 2, lines 7 - 45, i.e. data signal of a set is transmitted in a series of packets over a communication link; each packet is assigned A, B, C or D to specify the set it belongs to; a set of packets can be defined as a group of packet having e.g. the same flow, MAC address, or IP address, etc.).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Hendricks et al. to include the feature of packetized signal packets are identified with a global identification code as shown in Schaub et al. in order to increase transmission capacity.

(2) with regard to claim 23:

Lebizay et al. further discloses processing packetized signal packets corresponding to a particular global identification code to provide a set of processed packets (packets output to switch 1), assigning the set of processed packets a unique global identification code (switch 1) and storing the processed packets in packet storage locations and treating the processed packets as packetized signal packets. (queue 430 for switch 1).

Claim Rejections - 35 USC § 102

19. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

20. Claims 25 - 28 are rejected under 35 U.S.C. 102(e) as being anticipated by Lebizay et al. (US 2003/0156535).

(1) with regard to claim 25:

Lebizay et al. discloses a system comprising: a plurality of input stages (301, 302 and 303, Fig. 3), each of the input stages configured to receive an incoming packetized signal (300, Fig. 3) and store packetized signal packets extracted from the packetized signal in a memory system (430, Fig. 4); a plurality of output stages (450, 451 and 452, Fig. 4) each of the output stages configured to read packetized signal packets from the memory system and generate an outgoing packetized signal corresponding to the packetized signal packets read by the output stage (420, 421 and 422, Fig. 4); and a router controller (410, Fig. 4) for controlling the storage of the packetized signal packets in the memory system and the generation of the outgoing packetized signals in response to router control signals received from a master controller (a traffic-engineering algorithm, [0035]).

(2) with regard to claim 26:

Lebizay et al. further discloses the memory system includes a plurality of packet storage locations (430, Fig. 4) and wherein the router controller includes a storage location table (411, Fig. 4) to manage the usage of the packet storage locations and a global identification code distribution table (460 – 463, Fig. 4) to manage the distribution of packetized signal packets to particular output stages, and wherein the router controller is configured to instruct the input stages to store each packetized signal packet in a free packet storage location and to instruct each of the particular output stages to read the packetized signal packet from the packet storage location (the classifier 410 controls the storage of signal packets and the output of the signal packets).

(3) with regard to claim 27:

Lebizay et al. further discloses the global identification code distribution table (460, 461 and 462, Fig. 4) identifies the particular output stages to which packets having a particular global identification code are distributed.

(4) with regard to claim 28:

Lebizay et al. further discloses the storage location table (411, Fig. 4) tracks the number of output stages that require a packetized signal packet from each packet storage location and identifies a particular packet storage location as free if no output stage requires a packetized signal packet in the particular packet storage location (the routing table 410 controls the storage of signal packets to a free location in the queue 430 based on the traffic-engineering algorithm).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BO HUI A. ZHU whose telephone number is (571)270-1086. The examiner can normally be reached on Mon-Thur 10am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on (571)272-3088. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BO HUI A ZHU/
Examiner, Art Unit 2419
November 15, 2008

/Hassan Kizou/
Supervisory Patent Examiner, Art Unit 2419